SKELETON LAKE
AREA STRUCTURE PLAN

PREPARED FOR THE COUNCILS OF THE COUNTY OF ATHABASCA NO. 12, THE SUMMER VILLAGE OF BONDISS AND THE SUMMER VILLAGE OF MEWATHA BEACH BY THE SKELETON LAKE AREA STRUCTURE PLAN REVIEW COMMITTEE.

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90-02527/

COUNTY OF ATHABASCA NO. 12

BY-LAW NO. 25-1988

A by-law of the County of Athabasca No. 12, in the Province of Alberta, for the purpose of adopting the Revised Skeleton Lake Area Structure Plan 1988.

WHEREAS Council has adopted an area structure plan for Skeleton Lake insofar as it applies to certain lands within the County of Athabasca No. 12, by By-Law No. 16-1984 and amendments thereto, and;

WHEREAS Council has deemed it necessary to make changes to the existing SKeleton Lake Area Structure Plan in order to incorporate a revised and updated set of plan goals, objectives and policies as they pertain to lands within the County of Athabasca No. 12;

NOW THEREFORE under the authority and subject to the provisions of the Planning Act, R.S.A. 1980 and all other powers it enabling, the Council of the County of Athabasca No. 12 Duly Assembled Enact As Follows:

1. **THAT** By-Law No. 16-1984 and amendments thereto is hereby rescinded.

2. **THAT** the Skeleton Lake Area Structure Plan 1988, being the document attached hereto, is hereby adopted.

READ A FIRST TIME this 24 day of November A.D., 1988.

REEVE

COUNTY MANAGER

READ A SECOND TIME this 14 day of February A.D., 1989.

READ A THIRD TIME AND FINALLY PASSES this 14 day of February A.D., 1989.

CERTIFIED TRUE COPY

J. L. Woodward
County Manager

REEVE

COUNTY MANAGER

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PART 1. INTRODUCTION

In 1980, following the completion of a detailed lake water quality and lake management study for Skeleton Lake, the County of Athabasca and the Summer Village of Mewatha Beach adopted the Skeleton Lake Area Structure Plan. The overall purpose of this plan was to provide goals, objectives and policies which would ensure responsible future management of Skeleton Lake and the surrounding shoreland area.

Since the initial preparation and adoption of this plan in 1980, a number of amendments to it have been made by the County of Athabasca. However, the underlying plan goals and objectives have remained unchanged. In 1984, the County of Athabasca initiated a review of the Skeleton Lake Area Structure Plan in order to evaluate the effectiveness of the plan and determine if any changes to it were warranted. This review process, which was undertaken jointly with the Summer Villages of Bondiss and Mewatha Beach, was tabled in 1985 when it was decided that updated lake water quality information would be required prior to any final decisions on plan amendment or change.

Alberta Environment was subsequently requested to undertake an updated lake water quality assessment of Skeleton Lake. Late in 1987, following the completion of Alberta Environments' lake water quality study, the County of Athabasca decided to proceed with the review of the Skeleton Lake Area Structure Plan, incorporating the results and recommendations of the lake water quality study.

This document represents the recommendations of the Skeleton Lake Area Structure Plan Review Committee. It outlines a proposed lake management strategy for Skeleton Lake consisting of lake planning goals, objectives and policies which:

1. reflect the key lake planning issues and the critical limiting factors associated with them;

2. establish an appropriate lake development capacity limit for the lake;

3. propose a future direction for land/lake use and development; and

4. provide direction to the provincial government in the preparation of its own plans and programs which may affect the planning area.

PART 2. LAKE MANAGEMENT APPROACH/PHILOSOPHY

2.1 KEY PLANNING ISSUES/CRITICAL LIMITING FACTORS

Over the course of reviewing the Skeleton Lake Area Structure Plan and all amendments thereto, the plan review committee identified the following key lake planning issues as being current and prevalent at the lake. These issues have been summarized along with the associated "limiting factors" to development.

Key Planning Issues	Associated "Limiting Factors" To Development
1. Lake boating and lake activity conflicts	· a safe and recreationally acceptable level/mix of water-based recreation activity.
2. Negative impacts of lake development on lake water quality	· type and intensity of lake development which will not cause an unacceptable deterioration in lake trophic status.
3. Appropriateness of commercial camping at the Skeleton Lake Boy Scout Camp	· appropriate intensity, type and mix of recreational development within an institutional recreation setting.
4. Appropriateness of additional recreation and residential development	· an appropriate density, distribution and mix of recreation or residential development as it relates to an acceptable quality of recreation experience. · an appropriate density, distribution and mix of recreation or residential development as it relates to the bio-physical capabilities of the lake environment to support development.
5. Priority to provide additional water-based recreation development opportunities for future Albertans	· political desire/direction to encourage and satisfy a demand for additional lake-oriented development at Skeleton Lake.

Based on an identification of these issues and the associated limiting factors to development, the Skeleton Lake plan review committee proceeded to develop the following lake management philosophy which focuses on an attempt to satisfactorily resolve most of these key planning issues.

2.2 LAKE DEVELOPMENT CAPACITY

It is important to realize that a lake can have a number of different development capacities, depending on whether capacity is defined in terms of bio-physical, socio-perceptual or economic/political types of limitations. The most critical limitation (ie. development capacity) to lake development must ultimately be determined and defined by a lake management philosophy which is expressed via plan goals and objectives. The development capacity of any lake can change over time, dependent upon changes in the lake environment, technology, lake issues and economic or political priorities.

As previously discussed, five key planning issues and associated critical limiting factors to development were identified at Skeleton Lake. Based on a review and evaluation of each set of issues and factors, the plan committee had to determine which set was most important/critical. This would in turn establish the development capacity of this lake.

After much debate and discussion, the plan committee proposed a lake management philosophy for Skeleton Lake which establishes lake development capacity based on a blending of the following two critical limiting factors to development:

1. an appropriate density, distribution and mix of recreation or residential development as it relates to the bio-physical capabilities of the lake environment to support development;

2. the political desire/direction by the County of Athabasca to encourage and satisfy a demand for additional lake-oriented development at Skeleton Lake.

Simply put, the essence of this philosophy is to allow additional lake development, but only within the bio-physical capabilities of the lake environment to support development. The three remaining key planning issues and their associated critical limiting factors to development will also play a role in shaping the overall lake planning strategy. However, the goals and objectives developed to address these issues must be in the context of the development capacity established for the lake.

In order to quantify the development capacity of Skeleton Lake, the plan committee first examined two critical aspects of the bio-physical lake environment, namely, lake water quality and developable shoreline resources. According to the results of the water quality sampling program undertaken by Alberta Environment in 1985 and 1986, there has been no indication that lake water quality has deteriorated since 1978. There has been no change in the amount of algae (chlorophyll), oxygen, temperature and phosphorus loading. Any future development should have no negative impacts on water quality if clearing/development is carefully controlled and proper sewage systems are used.

An evaluation of the remaining undeveloped shoreline resources having capability to support water-based recreation development, revealed four areas with future development possibilities. All four areas are located in the westerly half of the south basin. Expansion of existing developed areas was not considered in an attempt to avoid increasing concentrations of existing use in these areas.

In an attempt to balance development economics with existing lake user concerns regarding overdevelopment and overuse of the lake, the plan committee has proposed that no more than 40 additional residential lots be permitted at the lake. In an attempt to accommodate future public demand for quality lake access, upgrading of existing day use facilities at County municipal reserves may be permitted where appropriate.

Part 3 of this document contains the lake planning strategy developed and proposed by the Skeleton Lake plan committee. This strategy reflects the management philosophy as previously described. Different strategies could have been developed if different lake management priorities and limiting factors to development had been emphasized.

PART 3. LAKE PLANNING STRATEGY

The planning strategy proposed herein consists of the following components: plan goals and associated measures and standards; plan objectives; and, plan policies.

The plan goals establish and identify the long term and results which the local municipalities wish to see at these lakes regarding future change and development. The "measures" provide the benchmark or measuring stick by which goal achievement can be determined. The "standards" are a quantitative expression of the desired performance or end result. Performance standards can, in fact, be modified without necessitating a change to the overall goal.

The plan objectives and policies which follow are the means and mechanisms by which the lake planning goals for Skeleton Lake may be achieved. The objectives represent more specific aspects of the plan goal, which in turn are implemented via the plan policies which specify particular actions, requirements and standards.

3.1 Plan Goal #1.

To maintain and improve, if possible, the water quality of Skeleton Lake for recreational uses.

measures: lake water quality parameters used by Alberta Environment as indicators of lake trophic status/lake eutrophication levels

standards: no increase in current lake trophic status as measured and revealed in the 1985-1986 Alberta Environment water quality survey

Objectives:

1.1 To ensure that no further lake use or development occurs at Skeleton Lake which would lead to a deterioration in recreational lake water quality or lake trophic status.

1.2 To ensure that future development and use at Skeleton Lake will not jeopardize or destroy sensitive fish spawning or habitat areas.

Policies:

1.1.1 The proponents of any future development at Skeleton Lake shall demonstrate to the satisfaction of the local municipalities and Alberta Forestry, Lands & Wildlife that sensitive fish spawning or habitat areas will not be jeopardized or negatively impacted by the proposed use or development.

1.1.2 Changes in lake trophic status need to be monitored at Skeleton Lake. The local municipalities shall approach Alberta Environment with a request to have water quality survey updates undertaken at the lake at 5 year intervals.

1.1.3 The depositing of livestock manure on lake ice, by farm livestock being watered on the ice, is illegal under provincial and federal regulations. To minimize the amount of harmful nutrients (manure) entering the lake, the municipalities shall assist with reporting such incidents to appropriate provincial/federal agencies.

1.1.4 The clearing of vegetation on lots shall be minimized in order to maintain aesthetic and visual buffers from neighbouring properties and to reduce soil erosion and nutrient runoff into the lake. A site plan detailing the protection of treed areas shall accompany any application for a development permit.

1.1.5 A treed/vegetation buffer at least 100 feet (30m) wide should be maintained between agricultural lands and the lake shoreline.

1.1.6 A treed/vegetation buffer at least 100 feet (30m) wide shall be maintained between any structural development and the lake shoreline.

3.2 Plan Goal #2.

To maintain the existing recreational role of Skeleton Lake and permit, where appropriate, further lake-oriented recreation/residential development.

measures: i) the amount of undeveloped shoreline with capability to support water-based recreation use/development

ii) the concerns of existing lake users regarding acceptable levels of lake development

standards: i) no more than 40 additional residential lots to be permitted at the lake.

ii) expansion/upgrading of existing County day use facilities to a level sufficient to allow quality public lake access

Objectives:

2.1 To allow at Skeleton Lake, further limited residential or recreation development within the bio-physical capabilities of the lake environment to support development.

2.2 To permit further limited residential or recreational development at Skeleton Lake but only in presently undeveloped shoreline areas having natural capability to support water-based recreation development.

2.3 Expansion within existing residential or commercial recreation development areas at Skeleton Lake shall not be permitted in order to avoid increasing the concentrations of existing use in these areas.

2.4 To provide quality, public lake access at Skeleton Lake by developing and upgrading County municipal reserve areas, where physically suited and appropriate.

2.5 To recognize existing lake user concerns regarding overuse and overdevelopment of Skeleton Lake, by limiting the number of additional residential/recreation lots permitted to 40.

Policies:

2.1.1 Further residential or recreational subdivision/development may be permitted in the following quarter sections as indicated on the Future Land/Lake Use Map: NE11, NW13, SW14, and NE14-65-19-S4th. A maximum of 10 lots may be permitted in each of the aforementioned parcels. Minimum parcel size shall be 3 acres (1.2 ha), maximum parcel size shall be 5 acres (2 ha).

2.1.2 Upgraded and expanded day use facilities may be permitted in County municipal reserve areas. Detailed planning and development of these reserves shall be undertaken by the County of Athabasca Regional Recreation Board.

2.1.3 No expansion of existing residential subdivisions or commercial recreation development at Skeleton Lake shall be permitted.

2.1.4 The local municipalities shall recommend to Alberta Forestry, Lands & Wildlife that all crown parcels located within the plan area be withheld from further tree removal and recreational or grazing disposition. Low intensity, low environmental impact recreation uses (eg. skiing/hiking trails, nature observation activities, etc.) however, would be permitted.

3.3 Plan Goal #3.

To reduce and eventually eliminate, if possible, conflicts among water-based recreation activities at Skeleton Lake.

measures: the number of reported water-based recreation conflicts, accidents or problems

standards: local concensus that the number of water-based recreation conflicts or problems are at an "acceptable" level

Objectives:

3.1 To develop policies which will encourage compatible co-existence among the differing types of water-based recreation activity.

3.2 To implement appropriate boating restriction regulations on Skeleton Lake to ensure safe and compatible boating activity.

Policies:

3.1.1 Swimming areas shall be officially designated adjacent to all existing (where feasible) and all future shoreline recreation development areas. The local municipalities shall make application to formally request such a restriction where needed.

3.1.2 Signs shall be posted at appropriate locations stating the boating regulations established at the lake.

PART 4. FUTURE LAND/LAKE USE CONCEPT

Depicted on Map 1 is the future land/lake use concept proposed for Skeleton Lake. This concept is a reflection of the lake development capacity, plan goals, objectives and policies established in the lake planning strategy.

The following land use areas (Map 1) have been established in this Plan for the purpose of clarifying and visualizing the plan goals, objectives and policies. Each of these land use areas has a stated purpose, which is reflected by policy development. The land use designation may be considered to be approximate except where such boundaries coincide with roads, quarter section lines or clearly recognizable physical features.

4.1 EXISTING MULTI-LOT RESIDENTIAL AREA

The purpose of this area is to identify existing multiple lot residential subdivision and development at Skeleton Lake. Further expansion, subdivision or resubdivision shall not be permitted (refer to Objectives 2.3 and 2.5). Within public reserve areas, public recreation facilities such as tennis courts, picnic grounds, lake access points and community halls which are compatible with single family residential dwellings and associated buildings may be permitted.

4.2 FUTURE MULTI-LOT RESIDENTIAL/RECREATION AREA

The purpose of this area is to identify those lands in the westerly portions of the south basin of Skeleton Lake which have been determined to be appropriate for limited, controlled residential/recreational use (see Objectives 2.1, 2.2 and 2.5; Policies 2.1.1 and 2.1.3). No more than 40 additional lots shall be permitted at the lake: a total of 10 lots may be permitted in each designated parcel. Extensive agriculture, including grazing, is recognized as a permitted land use activity within this area. Transportation, communication and utility facilities may also be permitted.

4.3 RESTRICTED RESIDENTIAL/RECREATION AREA

The purpose of this area is to identify principally those lands adjacent to Skeleton Lake where further multiple lot residential or recreation subdivision/development is considered inappropriate due to high densities of existing lake development and/or site suitability problems for such development (refer to Objectives 2.1, 2.2 and 2.5; Policy 2.1.3).

Notwithstanding, farmstead and single residential lot subdivisions may be permitted in accordance with existing municipal land use bylaws.

Extensive agriculture and farm related activities, including grazing, are recognized as permitted land use activities within this area. Emphasis shall be placed on restricting and future uses or activities which would negatively impact the lake environment. Transportation, communication and utility facilities may also be permitted.

4.4 INSTITUTIONAL RECREATION AREA

The purpose of this area is to identify the existing Boy Scout Camp established on the east shores of Skeleton Lake. Emphasis is placed on ensuring that only development and associated uses related to the intent and purpose of an institutional recreation camp and outdoor recreation activities are permitted. Development and activity which is compatible with the site and lake environment may be permitted. However, no commercial camping of any type shall be permitted.

4.5 COMMERCIAL RECREATION AREA

The purpose of this area is to identify the Boyle and District Golf Club and existing commercial recreation campground development at Skeleton Lake. No further expansion of these existing commercial campgrounds as presently approved shall be permitted (refer to Objectives 2.2 and 2.3; Policy 2.1.3).

PART 5. GENERAL LAKE MANAGEMENT PRINCIPLES

The following general lake management principles have been included to guide decision-making on specific future land/lake use and development proposals.

5.1 DEVELOPMENT

1. Residential development shall not be permitted on lands having critical development constraints. The following criteria shall be used in determining the suitability of land for seasonal/permanent residential development:

   (a) Groundwater of sufficient quantity and quality shall be available to support the proposed development. No development shall occur in areas where reserves of potable water are inadequate;

   (b) Development shall not be permitted in areas characterized by wetlands, swamps, muskeg, or saturate soils. Development shall also be prohibited in valleys, ravines, or seasonal draws;

   (c) Development shall be prohibited on slopes in excess of 15 degress or on slopes which are subject to slippage or mass movement;

   (d) Development shall be prohibited in areas where the vegetation is highly susceptible to damage from disturbance;

   (e) Development is prohibited in or adjacent to important wildlife habitat areas;

   (f) Development is prohibited on soils which have extremely fast percolation rates (2 minutes/inch or faster) and/or might result in the possibility of groundwater contamination.

2. Only ones single family dwelling unit shall be permitted on each lot, except as otherwise provided for under the Planning Act, R.S.A., 1980.

3. All development shall locate on parcels large enough to support any required on-site water supply and sewage disposal systems. All development shall be required to install sewage disposal systems which have been approved by the authority having jurisdiction. The use of a leaching pit or cesspool for kitchen sink waste/grey water disposal is strongly discouraged.

4. No development shall be allowed or continue to exist on public reserves if it does not serve the interests of the general public.

5. Any development or structure proposed on the lake shoreline or lakebed below the mean high water level shall be required to obtain authorizaiton from Alberta Forestry, Lands & Wildlife; a water resources permit from Alberta Environment; and, a development permit from the local municipality. Removable domestic piers or boat lifts do not require authorization from Alberta Forestry, Lands & Wildlife.

6. Any development proposed on either municipal or environmental reserves shall require a development permit from the local municipality.

7. Spaces for any approved day use or overnight camping facility shall be suitably organized and clearly marked. Adequate lake access and parking facilities shall be provided where appropriate.

8. Any development or subdivision proposed involving land surface disturbance within 400 metres of Skeleton Lake shall be referred to the Archaeological Survey of Alberta, Resource Management Secion, Alberta Culture to determine if a Historical Resources Impact Assessment shall be required. Under the direction of Alberta Culture, the developer shall be responsible for conducting studies and proposing any mitigative measures in areas where the proposal would destroy or alter the historic resource.

9. Landscaping and vegetation removal on each residential lot should be minimized in order to maintain aesthetic and visual buffers from neighbouring properties and the lake. A site plan detailing the protection of existing native treed areas shall be required with any application for a development permit.

10. The local municipalities shall request the local health unit to investigate situations where existing sewage disposal systems may become injurious or dangerous to public health. If required, corrective measures should be undertaken in accordance with the Public Health Act.

11. The local municipalities shall consult with the local public health inspector in an effort to provide a suitable method for disposal of sewage from sewage holding tanks located in the planning area.

5.2 MUNICIPAL SERVICING

1. The local municipalities shall consider the clearing, posting, and maintenance of walkways within the shoreland reserves to improve pedestrian access to the lake.

2. The local municipalities shall ensure that local municipal roads are adequately gravelled and maintained.

3. Signs should be posted by the municipality at boat launch sites and intensive use areas outlining boating and waterskiing regulations.

PART 6. PLAN ADMINISTRATION AND IMPLEMENTATION

6.1 PLAN AUTHORITY

1. Pursuant to the provisions of the Planning Act, R.S.A. 1980, and amendments thereto, this plan shall be adopted as the Skeleton Lake Area Structure Plan.

2. Subdivision, development and re-development of lands within the planning area shall be in accordance with the provisions of this plan.

3. The municipalities shall encourage the Provincial and Federal governments to have regard for the provisions of this plan in the development and re-development of crown lands, and in the formulation of Provincial and Federal policies and programs within the planning area.

6.2 LAND USE BYLAW

1. Any proposed subdivision or development shall be required to comply with the provisions of this plan as well as any provisions set forth in the respective municipal Land Use Bylaws.

2. In order to allow for the logical progression and proper timing of development, development may be staged (via subject site re-designation) through the use of the Land Use Bylaws.

6.3 PLAN REVIEW AND AMENDMENT

1. Councils may amend this plan at any time to incorporate new issues, goals, objectives, and policies. Councils shall establish a joint lake plan review committee for the purposes of reviewing and evaluating the effectiveness of this plan on an annual basis and where necessary, make recommendations to Councils on needed changes and amendments.

2. Councils shall refer any proposed amendments to the concerned provincial agencies including Alberta Municipal Affairs, for review and comment.

3. A Council shall consult with the other municipalities within the planning area, prior to adopting any amendment to this plan.

4. Amendments shall be adopted as amendments to the Skeleton Lake Area Structure Plan.

6.4 INTERPRETATION

1. The examples of uses sited for each land use area are intended to illustrate the range of activities possible.

2. In order to provide for flexibility in the interpretation, land use designation boundaries may be considered to be approximate, except where such land use boundaries coincide with roads, quarter section lines, registered plans of subdivision, valleys, streams, rivers, or other clearly recognizable physical features. Minor deviations may be permitted without amendment to this plan, provided that such deviations do not alter the intent of this plan.

3. Definitions and requirements of the municipal land use bylaws and the Planning Act, R.S.A. 1980, shall be used accordingly and within the respective administrative jurisdictions in the interpretation of this plan.

FUTURE LAND/LAKE USE CONCEPT

SKELETON LAKE AREA STRUCTURE PLAN